

Application No.: 10/632,195

Docket No.: JCLA7907-CA

AMENDMENTS**In The Claims**

Please amend the claims as follows:

1. (previously presented) A reading method to a flash memory from a data-access requesting component, wherein the flash memory includes a plurality of storage sectors, and a read operation to one sector of the storage sectors needs a plurality of stages handled by an access controller, the reading method comprising:

performing a first read operation to read a current sector of the storage sectors; and

starting to perform a second read operation to a next sector of the storage sectors when the first read operation is not completed yet; and

starting to perform a third read operation to read a further next sector of the storage sectors when the first read operation and the second read operation are not completed yet,

wherein the second read operation starts before the first read operation ends thereby decreasing the time required to perform read operations and increasing overall system performance,

wherein the stages includes a first stage for finding a sector of the storage sectors to be read, a second stage for transmitting an information to be read from the flash memory into the access controller, and a third stage for transmitting an information to be read in the access controller into the data-access requesting component,

wherein the second stage for the first read operation is overlapping with the first stage for the second read operation.

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Claims 2-3. (cancelled)

4. (original) The reading method of claim 1, further comprising recurrently performing the foregoing steps if another sector is still to be read.

Claim 5. (cancelled)

6. (previously presented) The reading method of claim 1, wherein the third stage for the first read operation is overlapping with the second stage for the second read operation.

7. (previously presented) The reading method of claim 1, further comprising starting to perform a first stage of a third read operation to find out a further next sector of the storage sectors to be read when the first read operation and the second read operation are not completed yet.

8. (previously presented) A reading method to a flash memory from a data-access requesting component, wherein the flash memory includes a plurality of storage sectors, and a read operation to one sector of the storage sectors needs a plurality of stages handled by an access controller, the reading method comprising:

performing a first read operation to read a current sector of the storage sectors; and starting to perform a second read operation to a next sector of the storage sectors when the first read operation is not completed yet;

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starting to perform a third read operation to read a further next sector of the storage sectors when the first read operation and the second read operation are not completed yet; and

starting to perform a first stage of a third read operation to find out a further next sector of the storage sectors to be read when the first read operation and the second read operation are not completed yet,

wherein the second read operation starts before the first read operation ends thereby decreasing the time required to perform read operations and increasing overall system performance,

wherein the stages includes a first stage for finding a sector of the storage sectors to be read, a second stage for transmitting an information to be read from the flash memory into the access controller, and a third stage for transmitting an information to be read in the access controller into the data-access requesting component,

wherein the third stage of the first read operation, the second stage for the second read operation, and the first stage for the third read operation are overlapping.

Claims 9-23. (cancelled)